

DIALOG(R) File 351:Derwent WPI
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012542797 **Image available**

WPI Acc No: 1999-348903/199930

XRPX Acc No: N99-260968

Vibration type actuator for camera lens focus drive

Patent Assignee: CANON KK (CANO)

Inventor: KOJIMA N; MAENO T; OKUMURA I; TAKEMURA K

Number of Countries: 029 Number of Patents: 009

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 923144	A2	19990616	EP 98309728	A	19981126	199930 B
JP 11164576	A	19990618	JP 97326384	A	19971127	199935
JP 11220891	A	19990810	JP 9874698	A	19980323	199942
JP 11220892	A	19990810	JP 9874700	A	19980323	199942
JP 11220893	A	19990810	JP 9874699	A	19980323	199942
CN 1242473	A	20000126	CN 98123393	A	19981127	200024
KR 99045630	A	19990625	KR 9851198	A	19981127	200036
US 6404104	B1	20020611	US 98197425	A	19981123	200244
KR 347124	B	20020918	KR 9851198	A	19981127	200317

Priority Applications (No Type Date): JP 9874700 A 19980323; JP 97326381 A 19971127; JP 97326382 A 19971127; JP 97326383 A 19971127; JP 97326384 A 19971127; JP 9874698 A 19980323; JP 9874699 A 19980323

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 923144 A2 E 40 H01L-041/09

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI

JP 11164576 A 10 H02N-002/00

JP 11220891 A 18 H02N-002/00

JP 11220892 A 19 H02N-002/00

JP 11220893 A 19 H02N-002/00

CN 1242473 A F03G-001/00

KR 99045630 A H02N-002/12

US 6404104 B1 H02N-002/00

KR 347124 B H02N-002/12 Previous Publ. patent KR 99045630

Abstract (Basic): EP 923144 A2

NOVELTY - The actuator produces vibration displacements in at least three different directions that are excited in the vibration member to generate synthetic vibrations and move the vibration member and the contact member relatively in a desired direction.

DETAILED DESCRIPTION - The piezoelectric elements (3) disposed between the middle elastic member (5a) and bottom elastic member (5b) are a second piezoelectric element for exciting longitudinal flexural vibrations in the vibration member in the x-z plane. A third piezoelectric element is used for exciting longitudinal flexural vibrations in the vibration member in the y-z plane. An INDEPENDENT CLAIM is included for: a vibration wave motor.

USE - For driving auto focus lens of a camera.

ADVANTAGE - Generates a driving force of a multi-degree of freedom by using a single vibration member

DESCRIPTION OF DRAWING(S) - The drawing shows a cross-sectional view of a vibration type actuator.

piezoelectric elements (3)

middle elastic member (5a)

bottom elastic member (5b)

pp; 40 DwgNo 3/30

Title Terms: VIBRATION; TYPE; ACTUATE; CAMERA; LENS; FOCUS; DRIVE

Derwent Class: P31; Q55; S06; V06

International Patent Class (Main): F03G-001/00; H01L-041/09; H02N-002/00;
H02N-002/12

International Patent Class (Additional): A61B-019/00

File Segment: EPI; EngPI

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3/5/1

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011505076 **Image available**

WPI Acc No: 1997-482990/199745

Related WPI Acc No: 1996-395307

XRPX Acc No: N97-402597

Generation of data relating to topography of medium and having high contrast surface illumination - moving medium relative to imaging structure having illumination source which directs light onto medium and image sensors for detecting areas of high and low brightness to form read image

Patent Assignee: AGILENT TECHNOLOGIES INC (AGIL-N); HEWLETT-PACKARD CO (HEWP)

Inventor: TULLIS B J

Number of Countries: 005 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 800307	A2	19971008	EP 97302270	A	19970402	199745 B
US 5686720	A	19971111	US 95396826	A	19950302	199751
			US 96627625	A	19960404	
JP 10065882	A	19980306	JP 9757567	A	19970312	199820
EP 800307	B1	20020904	EP 97302270	A	19970402	200266
DE 69715074	E	20021010	DE 615074	A	19970402	200274
			EP 97302270	A	19970402	

Priority Applications (No Type Date): US 96627625 A 19960404; US 95396826 A 19950302

Cited Patents: No-SR.Pub

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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EP 800307	A2	E	18	H04N-001/047	
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Designated States (Regional): DE FR GB

US 5686720	A	17	H01J-040/14	CIP of application US 95396826
				CIP of patent US 5578813

JP 10065882	A	16	H04N-001/107	
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EP 800307	B1	E	H04N-001/047	
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Designated States (Regional): DE FR GB

DE 69715074	E		H04N-001/047	Based on patent EP 800307
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Abstract (Basic): EP 800307 A

The method of acquiring data relating to the topography of a medium comprises providing a structure (10) including an illumination device (38, 30) and an array of colour sensors (24) each having a field of view. Radiation is directed from the light source towards the surface of the medium to define a path that is fixed relative to the sensor, and the path can be set at an angle less than 16 degrees with respect to the surface.

Relative movement is created between the medium and the structure, and during this areas of relatively high and low brightness are detected. An image is formed of the medium including tracking positions of the two areas during the movement step to determine position encoding or image information.

USE/ADVANTAGE - E.g. for high speed acquisition of position encoding and/or image reproducing data particularly for reproducing image from sheet of paper. E.g. for copier or printer or scanner. Compact and energy efficient. Acquires sufficient navigation information and/or print image data to allow quick movement across medium of interest.

Dwg.4/11

Title Terms: GENERATE; DATA; RELATED; TOPOGRAPHICAL; MEDIUM; HIGH; CONTRAST
; SURFACE; ILLUMINATE; MOVE; MEDIUM; RELATIVE; IMAGE; STRUCTURE;
ILLUMINATE; SOURCE; DIRECT; LIGHT; MEDIUM; IMAGE; SENSE; DETECT; AREA;
HIGH; LOW; BRIGHT; FORM; READ; IMAGE

Derwent Class: T04; W02; X26

International Patent Class (Main): H01J-040/14; H04N-001/047; H04N-001/107

International Patent Class (Additional): G01B-011/00

File Segment: EPI

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